Theory of Probability and its Applications 2003 vol.47 N3, pages 455-468

On the rate of complete convergence for weighted sums of arrays of banach space valued random elements

Hu T., Li D., Rosalsky A., Volodin A.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

By applying a recent result of Hu et al. [Stochastic Anal. Appl., 17 (1999), pp. 963-992], we extend and generalize the complete convergence results of Pruitt [J. Math. Mech., 15 (1966), pp. 769-776] and Rohatgi [Proc. Cambridge Philos. Soc., 69 (1971), pp. 305-307] to arrays of row-wise independent Danach space valued random elements. No assumptions are made concerning the geometry of the underlying Banach space. Illustrative examples are provided comparing the various results.

http://dx.doi.org/10.1137/S0040585X97979858

Keywords

Almost sure convergence, Array of Banach space valued random elements, Complete convergence, Rate of convergence, Row-wise independence, Weighted sums